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赤 澤 時 之*: 日本産 *Glaziocharis* の一新種に就いて

Yoshiyuki AKASAWA*: A new species of *Glaziocharis*
(Burmanniaceae) found in Japan.

On 22nd of June, 1943, Mr. Chikaichi Abe, a member of the prefectural natural history society at Tokushima went to Mt. Tairyûjisan, Naka county of the province of Awa, to collect land shells, and unexpectedly however merely one specimen of a curious semiparasitic plant, emerged out from fallen leaves in the shady forest along calcareous cliffy path at the foot of it. As it was during the war, and everything was in chaos, he lost the specimen. However, he kept a rough sketch of it, and it has been mimeographed with brief text in Vol. 1, No. 1 of Awa-no-Shizen (meant Nature of Awa province) in 1948.

No more specimen has been found since, until the middle of July of this year (1950), when Mr. Isamu Shinohara, the teacher of Kawashima high school found many individuals of the same plant at Obata of Sawatani village, while he was looking for fossils in limestone bed. He gave me generously the majority of his collections, and early in August he took me to the very spot to make me observe the ecological condition of the plant. Thus, I was able to make diagnoses of it from the living materials.

***Glaziocharis Abei* Akasawa, sp. nov.**

Rhizoma in humo atque foliis deciduis supra terram calcaream longe repens, ramosum, flavido-fuscescens 1-1.2 mm diametens, squamis decoloribus remote instructum. Caulis ex axillis squamarum rhizomatis

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evolutus erectus vel ascendens, cum squamis subulatis vel oblongis vel ovato-oblongis alternis obtectus 1mm latus, apice cum flore unico magno terminatus. Caulis, bracteae et flos semitranslucenti-albus. Bracteae lanceolae 2-4 basim floris circumdant. In speciminibus submersis plus transpare veniunt et stamina ovariumque discernire possumus. Flos magnus solitarius circ. 15mm longus 6-7mm latus. Ovarium inferum. Perigonii tubus obovoideo-campanulatus vel obovoideo-urceolatus parce curvulati-zygomorphus 10mm longus, parte inferiore angustiore 4mm lata superiore inflata 7mm lata, extus glaber, intus laevis. Petala 6, exteriora 3 subulata in alabastro jam reflexa 3mm longa basi anguste alata, interiora 3 obovata basi erecta apice conniventi-imbricata obtusa et denticulata 5-6mm longa dorso costa in appendice subulata vel lineare 5-6mm longa parce inflexa producta. Margo receptaculi ovarium circiter 1-2mm longe superans; perianthium igitur ex hac marginem articulatum sejunctum et ut toto deciduum. Stamina 6 fauce corollae affixa, filamentis basi confluentibus et in partes liberas geniculatim inflexis ubi extus ciliolatis et viridulis ita corolla apice petala superans et tubum brevem formare videtur. Partes filamentorum liberae triangulares et in connectiva obovata ciliata apice obtusa vel emarginata transeunt. Circa bases connectivorum in facie interiori antherae binae oblongae uniloculares longitudine dehiscences affixae. Ovarium inferum obconicum flavidum uniloculare cum placentis 3 longitudine elevatis multi-ovulatis. Ovula anatropa longistipitata cum integumento unico. Stylus brevis solitarius. Stigmata 3 triangularia margine serrulata sed glabra.

Nomen Japonicum novum: *Tanuki-no-syokudai* (meaning candle-stand of badger).

Habitat in Japonia, Insula Shikoku, Prov. Awa: in sylvis Tairyûji, ubi Chikaichi Abe detexit sed specimen perditum; Obata oppidi Sawatani (Isamu Shinohara, 12 Jul. 1950, specimen holotypicum in herb. Musei Nationalis Scientiarum in Tokyo servatum, isotypicum in herb. Universitatis Tokyoensis), ibid. (I. Shinohara, C. Abe et Y. Akasawa, 4, Aug. 1950).

It is a wonderful fact that a new species of this Brazilian genus was found on so far detached land, Japan. The home of this plant is just the foot of lime-stone, several meters high, where heap of halfway decayed

leaves are covering the ground. This saprophyte stretches its rhizome under the mould, the appendages of corolla-lobes only emerging out of fallen leaves, as if certain animal is putting out his tentacles. Being the circumstance such, it is impossible to find it for ordinary plant hunters. We should say that extraordinary fortune had smiled on Mr. Abe, as he could have a rare chance to meet this plant because of his collecting of land shells. It has all main generic characteristics of *Glaziocharis**, however, the shape of petals, their appendages, ovary, and position of anthers are different from Brazilian species, and the stigmas are glabrous. A slightly zygomorphic corolla-tube would be a characteristic worth to mention as a *Glaziocharis*. I have named this plant in memory of the first detector Mr. Chikaichi Abe. I think that the first figure of this plant published by Mr. Abe and which is very far from reality made Prof. Honda and Dr. Tuyama (cf. Journ. Jap. Bot. 22, No. 1.-2) to consider this plant as one of the genus *Geomitra*.

Plate I. A. Entire plant in natural state ($\times 3$) B. Entire plant, figured from submerged specimen, in which stamens, ovary, and stigma can be seen ($\times 2.5$) C. Plant which has lost already deciduous flower-parts ($\times 2.5$) D. Flower bud ($\times 2.5$) E. Longitudinal section of a flower ($\times 5$) F. Flower seen from above ($\times 3$), showing how the inner petals are imbricated. G. An inner petal, seen from outside ($\times 7$) H. An outer petal, seen from outside ($\times 7$) I. Dorsal view of a stamen ($\times 7$) J. Ventral view of a stamen ($\times 7$) K. Lateral view of a stamen ($\times 7$) L. A scaly leaf ($\times 7$) M. Cross section of ovary, a little pressed ($\times 7$) N. Ovary and stigma ($\times 7$) O. Longitudinal section of ovary ($\times 7$) P.-Q. Ovules ($\times 50$)

Plate II. Fig. 1. Photograph of *Glaziocharis Abei*. Specimens are dipped in alcohol ($\times 2$), scales in mm.

本種は圖に示した如き奇怪なる形態を呈し、全體が落葉中に埋れる腐生植物の一種であり、最初、昭和 18 年 6 月、阿部近一氏が徳島縣那賀郡大龍寺山の石灰岩地で陸産貝を採集中、落葉に埋れた本種を只一個得られたが、戦時中であつた爲め、標本を失はれてしまひ、そのスケッチだけが「阿波の自然」1 卷 1 號に載せられた。それに基いてこの奇怪なる植物は既に本田、津山兩博士に依つて植物研究雜誌 22 卷 1-2 號に紹介せられている。其の後、實物が見つからなかつたが、本年 7 月中旬、川島中學校教諭篠原勇氏が澤谷村小畑の石灰岩地で化石を採集中、多數本種を採集せられ其の過半数を筆者に惠與せられた。尙又同氏は現地へ 8 月上旬、案内して下さつたので、生のままを解

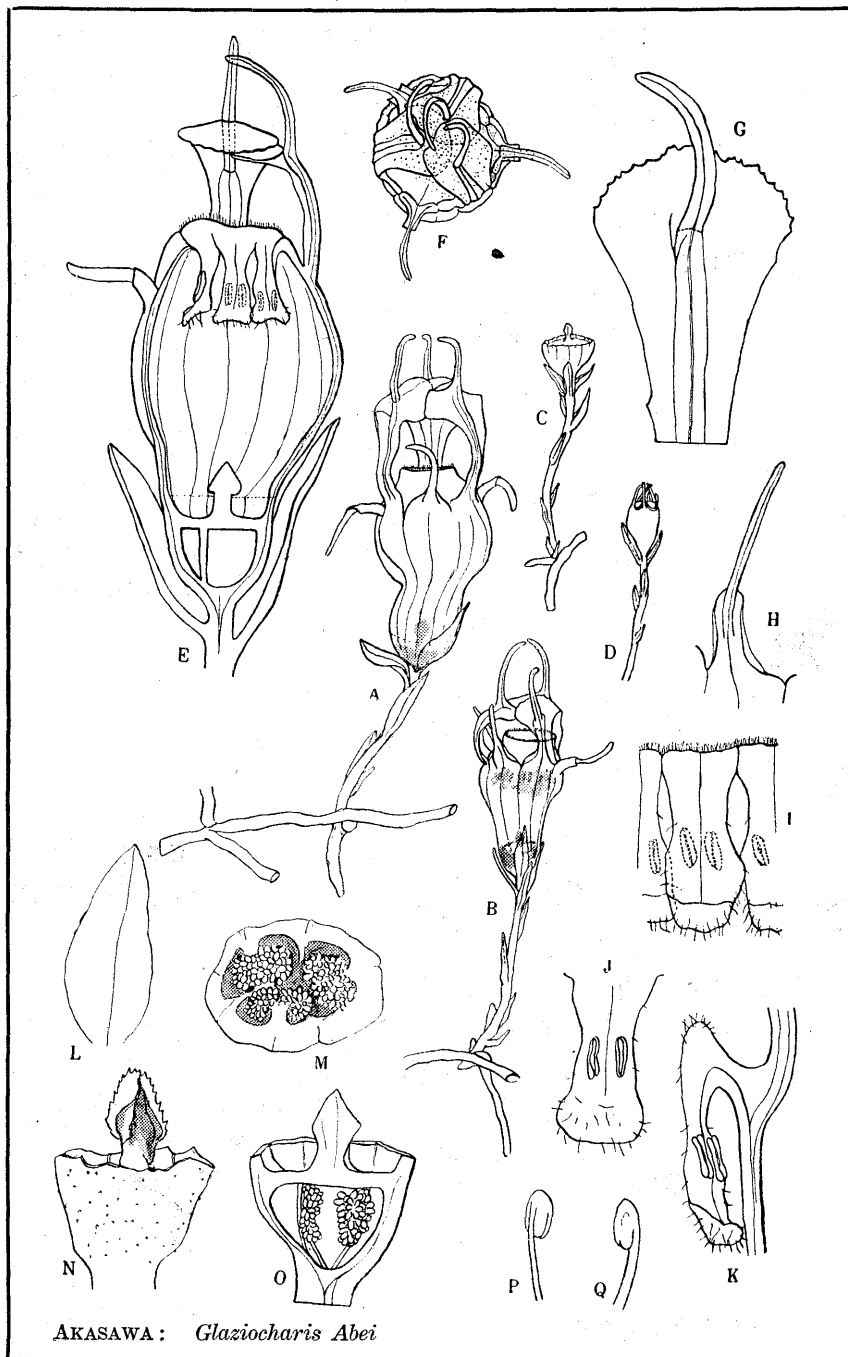
* *Glaziocharis* Taubert in Verhandl. Bot. Verein Brandenburg: 66 (1894); Warburg in Bull. Acad. Royale des Sciences et Lettres de Dannmarck: 175 (1901); Pilger in Engler, Nachtrag III zu Teil IV der Naturl. Pflanzenfam. 72 fig. 12 a-E (1905)

剖して花の内部構造を詳しく知るとともに、自然の生育状態を観察するを得たので、其の知見を報告することにした。

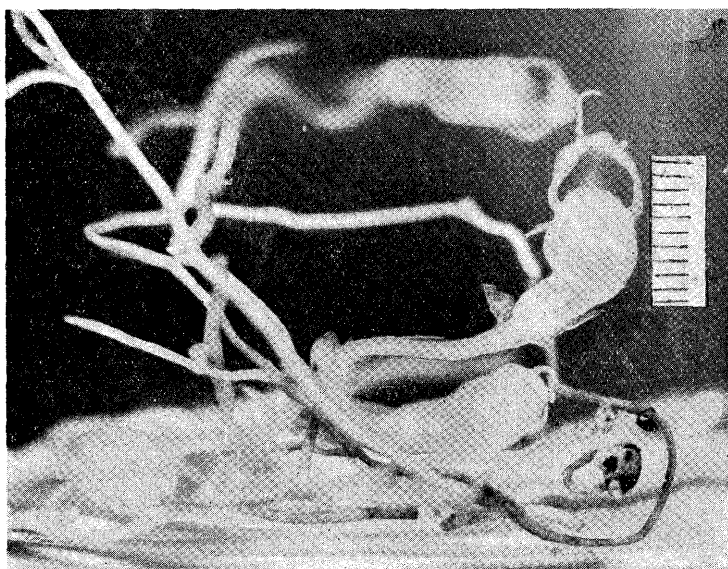
根莖は石灰岩地の腐植落葉中に長く匍匐し、黄褐色を帯び分岐する。その分岐点から莖が直立又は斜上して頂端に大花を着く。莖及び花は半透明白色であり、花の下部に、同色の苞を(2)~3~(4)個着け、莖には退化鱗片状の葉を着く。液漬標本では第2圖版第1圖の如く透明度を増し、子房及び雄蕊が外部から透視出来る。子房部は淡黄色であるから生の時にも少々不明瞭であるが透視出来る。花筒の上部の喉部は花が充分開花すると少しく淡緑色を帯びるものがある。花筒は殆んど全部の個體が彎曲し歪形である。彎曲部の下、子房上面1mm位の所から第1圖版Cの如く、上部の花部は開花状態のまま一塊となり脱落する。内外兩花蓋片は其の背面中央に脊稜を有し、其の先端が附屬體の絲状突起となる。内花蓋片の突起は上部三分の一附近の所で反卷する、多くは外卷するも内卷するものもある。尙又内花蓋片は第F圖の如く、三つが完全に癒合するのでは無くて重なり合つてをり強く引けば花蓋片は接合点から分離する。蕾は第D圖の如くであるから開花時に内花蓋片は急速に伸長するものと思はれる。花喉部は微毛が密生し、譬へば瓶口の如き形状を呈している。柱頭は三翼が有り、之に少々長い刺毛があり、顯微鏡下では、丁度ギンギシの瘦果を連想させる。雄蕊は反卷下垂する、藥室は内部から透視し得る。

以上の構造から判定すれば、*G. macahensis* Taubert に近似の一種と思はれる。Warming の原記載及び原圖と比較すると、内花蓋片の突起が短かく、先端が棍棒状を呈せず、花喉が六鋸齒状に切れ込まず、雄蕊の構造も異り、寧ろ他の *Thismia* に似てをり藥室が巾の廣い藥隔で離れてをり、尙又卵子が完全に倒生で半倒生でない點が異點として挙げられる。従つて筆者は本種を *Glazioucharis* の別種と判定する。

本報を草するに當つて恩師、現國立科學博物館長中井猛之進先生に厚く感謝の意を捧げる。又昨年東大留學中、本種の研究に御指導を戴き且つ参考文献の閱覽に便宜を與へられた本田正次教授並に前川文夫助教授に深く謝意を表す。尙又、貴重な標本を惠與された上、現産地へ案内の勞をとられ研究を容易にして下さつた篠原勇氏にも厚く感謝する。(10, 8, 1950)



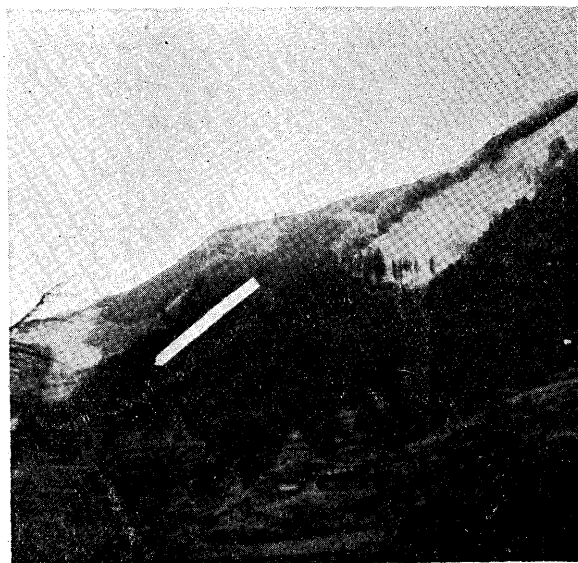
第 1 圖



第 3 圖



第 2 圖



Glaziocharis Abei

圖版説明は赤澤及び阿部論文中にある。